

THE
EVOLUTION OF MEDICINE AND
SURGERY AS A SCIENCE

AND THE
EVOLUTION OF ST. GEORGE'S HOSPITAL
AS A SCHOOL

AN INTRODUCTORY ADDRESS

DELIVERED OCTOBER 1, 1890

BY

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"Ignorance is the curse of God,
Knowledge the wing wherewith we fly to heaven!"
2 Henry VI. iv. 7

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*An Introductory Address delivered at
St. George's Hospital, October 1st,
1890.*

MR. CHAIRMAN AND GENTLEMEN,—This afternoon it is my privilege to give a hearty welcome to you all, as fellow-students, and to invite your attention to an opening address.

To my colleagues I tender sincere thanks for unvarying courtesy and kindness during years of active association.

To other Hospital friends, absent and present, and to the new friends who join us this session, I wish an earnest God-speed.

I have listened with admiration to many annual addresses delivered in this theatre, and I only accepted the invitation to confront an audience myself, after careful and anxious hesitation.

Without the gift of oratory, so brilliantly displayed here by some of my predecessors, and

distrusting my power of competing with others as an essayist, I have decided to risk your criticism in the less ambitious position of a mere historian.

The subject of my historical sketch is the evolution of medicine and surgery as a science up to the founding of our first college, and the evolution of St. George's Hospital as a school : and I selected it in the hope of being able to interest you in what has greatly interested me.

But before beginning this narrative, I will briefly refer to the change and reform which has taken place in connection with our *Alma Mater* during the past year, and there is one reform which must mark an epoch in its history.

This consists in the duplication of the junior staff of physicians and surgeons, and I deal with it first, because a distinct importance gives it, in my opinion, a distinct preference.

It offers what I may term the possibility of an "all round" advantage.

To the students (and I place what is to their benefit in front, because the welfare of the sick is dependent upon the early training of those who attend them) the advantages are difficult to over-estimate.

They can gain in supervision, in careful

direction, in particular clinical study and instruction, and in opportunity for individual experience and research.

To the residential staff all these advantages should be even more distinctly emphasised and apparent.

To those who seek relief from our Hospital, the benefits are not merely prospective. The weary waiting in the out-patient room will be immediately relieved, and the business-like phrase, "continue as before," after a moment's interview, can be supplemented by some words of explanation and encouragement. The in-patient can feel less nervous about questioning the resident officer because "he is so busy," when the answer to the question may mean something more than a personal relief and represent no small factor in the successful treatment of the disease.

These are mere sketches of the immediate capabilities of this reform, and but feebly comprehend its complete value as a progressive measure.

I now come to our changes. We have lost, but we have also gained.

The resignation, through ill-health, of so eminent a colleague as Dr. Gamgee, calls forth something more than a selfish regret; but it introduces the services of Dr. Penrose, to

whom, in the name of the staff, I now give greeting.

My appointment, as consulting dental surgeon, brings forward Mr. Henry Albert into the more active position I have vacated, and it is my pleasure to welcome him as a colleague we all greatly respect.

The addition to the staff of dental surgeons, in the re-appointment of Mr. Vasey, gives me particular gratification, for he was my first teacher, and the creator of a dental specialism in St. George's Hospital. What he has done for our section of surgery is inadequately conveyed in the reflection that he has personally relieved thousands, and by his excellent teaching given hundreds of students the opportunity of proving worthy of their master. To find my name coupled with that of so valued a friend and so eminent an authority, is an honour I cannot over-estimate.

In considering the evolution of medicine from complete obscurity, I propose to pass over its possible emergence from the lowest depths of magic and mystery during the time of the Egyptians and early Hindoos, and take, for my starting-point, a period that has some written history, of however doubtful a contemporary value.

Æsculapius was acknowledged by Homer to

have been an excellent physician of human origin, so we can only regret his later reappearance, clothed in the garb of a Grecian god, as that of a colleague who had fallen from good estate.

According to some commentators, his medical and surgical knowledge far exceeded anything that has been attained in modern times, but Plato (born B.C. 428), Plutarch and Pindar (born B.C. 522), agree that the practice of his science was by "songs, drinks, external medicines, and incisions."

We have no record of the composition of these "drinks" and "external medicines," so his credit as introducing some form of "pre-
scribing" represents the only value to us of his connection with any evolution of medical science.

The introduction of prescribing.

With his degradation to godhood, any further association of this "father of medicine" with the development of his art would be unreasonable, were it not that we find history refers to the exercise of his earthly profession being continued by his two sons, Machaon and Podalirius. These descendants of a doubtful ancestry were surgeons by appointment to the Greek Army during the siege of Troy, and, according to undisputed authority, were brave and attentive to their patients.

The early distinction between the practice of medicine and surgery.

It is noteworthy that with these reputed sons of Æsculapius we come upon the first movement towards separating the special practice of medicine from that of surgery. Machaon was, we are told, distinctly a surgeon ; but Podalirius had received from his father "the gift of recognising what was not visible to the eye and tending what could not be healed."*

As the figures of these two ancient practitioners form the supporters of the Arms of our Royal College of Surgeons, their later history may be worth a few moments' consideration.

Machaon, according to Homer, was wounded in early life, though he recovered under a *régime* of Pramnian wine with cheese and onions, prescribed for him by the sage Nestor. Eventually he met with a tragic death, but not until he had begotten six sons, who all adopted the profession of their father.

The several accounts of Podalirius differ, so I feel justified in selecting the most romantic as the most appropriate to my present subject, because it introduces the first record of an operation, which has since been so terribly abused.

Returning from Troy, the misfortune of shipwreck left him a wanderer on the peninsula of

* From Ethiopis of Archinus, quoted by Welcher and Hæser.

Caria, where he was kindly welcomed by king Damoetas.

At this time the Court was in despair, for the young princess had fallen from the roof of a house, and was bewailed as one about to die. But Podalirius effected a cure by *bleeding her in both arms*, and here we have the first historical account of the performance of localised blood-letting as distinct from general incisions. The first record of localised blood-letting.

I pause after referring to the earliest record of "prescribing," of a distinction between medicine and surgery, and of localised blood-letting, to speculate upon the possibility of the earliest record of a fee.

Podalirius became betrothed to his patient, and received her hand in marriage, presumably as a suitable reward for his professional services.

Thus far the written history of medicine, although mingled with mystery, appears to have been unaffected by the influence of trickery. But unworthy successors of Æsculapius and his sons appeared in the sect of Asclepiads, who claimed to have inherited the skill of the "God of healing."*

Forming themselves into a priesthood, they associated the practice of medicine with that of priestcraft. The Asclepiads.

* Æsculapius.

They declared all professional knowledge to be sacred, and only to be passed on from father to son under an oath, which the latter was obliged to take before being put in possession of the medical secrets.*

The association of priest-craft and medicine.

These charlatans attached themselves to the temples of Æsculapius (usually erected in the healthiest places), and to which the sick were carried. Here the patients were supposed to have the cure for any particular ailment revealed to them in a dream, which was only capable of interpretation by the priests, and before leaving made an offering to the "God," and had the nature of their cases and cures inscribed upon votive tablets, with which they decorated the walls and columns of the temples.

Under these restrictions the practice of medicine was imprisoned for centuries, and any possible early development of its science remained buried as a profound secret.

Effect of the earlier philosophical schools.

The value to medicine of the philosophical doctrines of Pythagoras (born B.C. 540), Anaxagoras (born B.C. 500), and Democritus (born B.C. 460), who was the author of the atomic theory, is a very doubtful quantity, but perhaps their greatest collective service consisted in an accentuation of the spirit of rivalry

* See Galen, Anat. ii. p. 128.

which eventually broke up the reign of the Asclepiads. Metrodorus
and public
instruction.

With the revolt of Crotona the teachings from the temples practically ceased. The study of medicine was open to all comers, and by the public instructions of Metrodorus (B.C. 440?) the public practice of medicine was initiated.

Any useful knowledge hitherto preserved as a secret was now offered to the world, and professors of medicine, known as *Periodontæ*, were found migrating from town to town in search of pupils and patients.

About this period the real author of the medical art, and of the character of the physician as we now understand it, appeared in Hippocrates (born B.C. 460), and, historically, the seventeenth or nineteenth in direct descent from Æsculapius. Hippocrates
and the first
system of
medicine.

From his own writings we can gather the first distinct system of medicine, which, however faulty, represents the root of a fruitful tree.

The mainspring of his doctrine was *the intense value of the closest observation*, but this grand step forward was almost paralysed by his famous theory,* that *the body contained four humours—blood, phlegm, yellow bile and black bile*. A right proportion and mixture of these was

* Known as the "humoral theory."

declared to constitute health, and *the value of observation was to be subservient to the recognition of this as an axiom.*

A doctrine of secondary but considerable importance was the *healing power of nature*, which was to be assisted, but never hindered, so that the sick man might conquer disease, *by the aid of his physician.*

I may here mention that it is somewhat difficult to reconcile such moderation with the maxim usually attributed to Hippocrates, that *what could not be cured by medicine could be cured with the knife, and what could not be cured by the knife could be cured by fire.*

The crises or “periods of expulsion of the humours” through one of the natural channels of the body were always anxiously looked for, and he declared it to be most important to foretell them with precision.

To establish a correct prognosis, based upon the results observed in previous cases, was to be the aim of every physician, hence the importance of recording all the details of clinical experience, and the introduction of what we now term case-taking.* Diagnosis was in its extreme infancy, as without the knowledge of

* It has been said that the inscriptions on the votive tablets in the temples, first suggested to Hippocrates the value of clinical records.

anatomy there could be no scientific nomenclature of disease.

With regard to treatment, diet was his first active principle; then came the exhibition of one or more of the known drugs,* but only at such times as experience warranted their tending to the greatest relief of the patient.

The value of the pulse, as an indicator of health or disease, was presumably unknown to this teacher, as it is never referred to in any of those works which can reasonably be attributed to him.

After the death of Hippocrates, the researches of his pupil, Aristotle, in comparative anatomy and physiology, greatly assisted the progress of medicine, and his teachings bore good fruit, which remained sound for centuries after his death.

The value of the lay teachings of a scientist.

Although Aristotle is guaranteed by several contemporaries as the friend of Plato, the friend of Socrates, but above all the friend of truth, time will only allow me to briefly mention two of the more important discoveries, *i.e.*, truths, with which he is credited. The assigning the origin of the blood-vessels to the heart, though he failed to distinguish between arteries and veins, is the first, and the recognition of a contractile property in muscular tissue is the second. Anti-

* There were about 260 known drugs at that time.

First refer-
ence to
vivisection.

vivisectionists must regret that this particular advance in physiological research, was the result of his opening the living chameleon and observing the actions of its intercostal muscles.

The earliest
medical
schools.

The conquests of Alexander, led to the formation of more than one learned centre, in which medicine had its share with other sciences, and of these Pergamus was the first to become famous as a medical school.

Their disad-
vantageous
intimacy with
those devoted
to philosophy.

But notwithstanding this great opportunity for the further development of our art, medicine and philosophy, under the dogmatists of Cos, and later on under the empirics of Cnidos, were almost as disastrously combined, as were priest-craft and medicine in the days of the Asclepiads before Hippocrates. And this deadlock continued for centuries.

The empirics.

I should here explain that the empirics were a sect brought into existence by the decaying condition of the dogmatic school about B.C. 280.

“Experience” was the key-note sounded by its earliest founders, and no one was justified in pretending to any real knowledge in disease, without having frequently observed similar cases under like circumstances.

“Theorem” was the term by which the remembrance of such cases was designated, and the physician with the greatest number of “theorems” took the highest rank.

Later on some of the originators of this sect indicated a third method of arriving at a knowledge of curative means, and this, which consisted in a comparison being drawn between existing cases and similar ones, was known as "analogism."

Although it is evident that the foundation-stones of this school were quarried from the whole fabric erected by Hippocrates, Serapion Serapion. of Alexandria, one of the reputed founders, wrote in no measured terms against the Hippocratic teachings, and busied himself almost exclusively with researches on drugs.

Celius Aurelianus in quoting his book "Ad Sectas" censures him for the acrid remedies he prescribed in angina, and for his neglect of dietetics; and Dunglison, in referring to the superstitious remedies employed at that period, states that besides using castor for epilepsy, Serapion recommended the brains of the camel, the heart of a hare, the blood of the turtle, the rennet of the sea-calf and the excrement of the crocodile.

Up to the founding of the Alexandrian school by the first Ptolemy* about B.C. 300, The founding of the Alexandrian school. the dogmatics and empirics freely discussed the philosophical aspects of disease, but without any apparent interest in its structural relations.

* Ptolemy Soter.

Introduction
of human
dissection.

The existing laws disallowed any interference with the dead, and no one was permitted to die within the temples, lest the curiosity of the priests should tempt them into disobedience.

Herophilus
and Erasistratus.

The early Alexandrians were subject to no such restrictions, and, stimulated by the discoveries of Aristotle in natural history and comparative anatomy, undertook, for the first time, to describe the human frame from actual dissections.*

In this school Herophilus taught anatomy and dissected bodies of malefactors and, according to some historians, even opened those of living criminals. Together with Erasistratus his rival, who first distinguished between sensory and motor nerves, he made clear most parts of the human body, and to him belonged the credit of following the nerves to their origin in the spinal cord and brain. He also traced the arachnoid into the ventricles, which he imagined were the seat of the soul, and followed the tortuous sinuses of the dura mater into that meeting point, which to the present day is known as the "Torcular Herophili." His erroneous association of the arterial system with that of the bronchial is a pleasing reflection, as it discredits the probability of his having ever vivisected human beings.

* See Med. Prof. of Ancient Times, by J. Watson.

Later on the public discussions, of medicine and philosophy, led to controversy and speculation taking the place of continued scientific research, until a rivalry, similar to that existing between the dogmatists of Cos and the empirics of Cnidos, arose between the younger school of Alexandria and its elder brother Pergamus. Meryon states that the second Ptolemy* interdicted the export of papyrus, because he was jealous lest the library of Pergamus should excel that of Alexandria; a prohibition which stimulated the King of Pergamus† to the discovery of parchment, and to the enrichment of his kingdom by its commerce. “Thus,” says Watson, “two of our own words, paper, from papyrus, and parchment, from Pergamus, stand as monuments of the rivalry in collecting books which once existed between Eumenes of Pergamus and Ptolemy of Egypt.‡

Period of stagnation and its cause

At the time Galen began to devote himself to medicine, about A.D. 155, the dogmatists and empirics continued even more occupied in philosophical antagonism than in any scientific advancement, and an important third party, known as the methodists, was disputing their field of battle. In addition to these, three minor sects, of recent date, were enlisting recruits

The forward movement under Galen.

* Ptolemy Euergetes. † Eumenes.

‡ Watson's Med. Prof. of Ancient Times.

under the names of eclectics, pneumatics, and episynthetics.

Galen declined to attach himself exclusively to any of these schools of philosophical medicine, and even assumed an attitude which might have disconnected medicine and philosophy had it not embraced such tenets of the existing schools, as he believed to represent the simple truth. As with his death all the old sects disappeared, it is reasonable to conclude that they became merged in his followers.

So great was the genius of this master, that by a system of investigation, the reverse of what we should now consider correct, he almost invariably succeeded in attaining the object he had in view.

His services, though hampered by a philosophical vein, always evident (notably his theory of "temperaments"), were of immense value to the progress of medicine, but his advancement of the knowledge of anatomy and physiology was the least encumbered with speculation, and the most valuable work of his whole life.

Our interest in this stage of evolutionary medicine is accentuated by the reflection that he never refers to having had any personal experience in human dissection, though he frequently recommends that of apes, bears, goats, and other animals. As evidence of his valu-

able researches being conducted without the advantages open to Herophilus and others, he mentions, in one of his numerous works,* as something extraordinary, that those physicians who attended the emperor Marcus Aurelius in his war against the Germans, had the opportunity of dissecting the bodies of the barbarians.

The spread of Christianity seems to have resulted in the complete disconnection of philosophy and medicine, followed by an intimate association of the new theosophy with most of the medical schools.

The decline during the early spread of Christianity.

During the first century A.D., the doctrine that only the Apostles were capable of healing disease, by a recognised form of "laying on" of hands and "inunction with holy oils," was very popular. Later on it was supplemented by a belief in the disciples of Christ having transmitted this power to the elders of Christian communities.

With the influence of these tenets, medical literature, as an aid to medical science, stood still, except in the Alexandrian school, and even there its effects appear to have been severely felt, as all the efforts of the immediate

Medical literature almost at a standstill.

* *De compositione medicamentorum secundum genera* iii. 2 vol., XIII., p. 604.

successors of Galen, in the third and fourth centuries, were barren.

Indeed among the physicians, referred to as famous, were Marcellus, who produced forty-two valueless books on medicine in hexameter verse, and Sextus Placidus Papiensis, who treated quartan ague by the local application of the heart of a hare, and recommended a boiled new-born puppy to be eaten as an everlasting prophylactic against colic.

Elsewhere the mass of publications connected with medicine represented the effusions of certain monks, and contained ridiculous suggestions for a line of treatment to be chiefly assisted by the employment of particular charms.—I wish it to be distinctly understood that my position in referring to these earlier associations of Christianity with the evolution of medicine, is that of a plain historian. No one can regret more than I do that the opportunities offered by the introduction of so glorious a creed should have been first neglected and then dishonoured.

It was not until the fourth century A.D. that out of the shadow of the once brilliant Alexandrian school a distinct illumination arose in the labours of Oribasius, A.D. 326-403. At the request of the reigning Emperor, Julian the Apostate, he made extracts from all the litera-

Its first
revival by
Oribasius.

ture left by the ancients, and, after methodical arrangement, divided them into seventy new books, of which we still possess seventeen: but before undertaking this work, he had cut himself adrift from the influence of the monks, by reverting to paganism.

Between the period of his literary efforts and those of *Ætius* of *Armida*, there is not one name which is worthy of mention, nor any advancement of a single branch of medical science, with which we can claim acquaintance.

Its second revival, after a relapse, under *Ætius* of *Armida* and others.

The exact date of *Ætius* is unknown, but it is most probable that he began his writings about the middle of the sixth century. He was the author of sixteen books of medicine, none of which were remarkable for original matter, but as representing a judicious compilation from the writings of many authors, whose works have been lost, they must be accepted as valuable remains of the historical development of medical science.

He was succeeded by *Tralles*, 500 A.D., who almost trod upon the heels of *Paulus Ægineta*, a surgeon and obstetrician worthy of a long remembrance. His great work on surgery was translated into Arabic and laid the foundation-stone of a more perfect architecture erected by *Abulcasis*, which became one of the chief monuments from which Europe derived its improve-

Its death.

ments in the "Middle Ages." With the death of this great teacher, the *requiem* of the earliest school of medicine was sounded, for after his decease no works of any merit were written in the Grecian language.

The rust which accumulated upon this stage of medical science, during the greater part of two centuries, was vigorously attacked by the Islamite rulers in Spain, where special encouragement was given to medicine and general culture. But a fair share of credit is due to the Jews who had already initiated medical schools, which became fully established under Mahomedan government.

The birth and death of the Arabian period of medicine.

This period, known as that of Arabian medicine, extends from the eighth to the twelfth century, and introduces, categorically, the important names of Rhases, who was the first to describe smallpox; of Mesna, the younger, of Damascus, the accepted author of *De Simplicibus*, which for centuries was the standard work on Materia Medica; of Abulcasis of Cordova, the great encyclopædist, whose work was translated into Latin, and of long repute as the chief authority on surgery in Europe; of Avicenna, the author of another famous encyclopædia, founded upon the works of Aristotle, Galen, and the later Greek physicians; and of Averrhoes.

With the death of this celebrity the evidence

of any further Saracenic teaching ceases. Its results. Though its period of existence was short it was productive of good service to medicine. It introduced many new and useful drugs, notably rhubarb, cinnamon, senna, and camphor, and made known what may be termed the elements of pharmaceutical chemistry, by the discovery of distillation and the means of obtaining various metallic oxides and salts. It also deserves, according to Dunglison, the credit of witnessing the first establishment of public hospitals and pharmacies, which were erected, by the caliphs, in the ancient city of Bagdad.

It is unfortunate that the influence of the Mahomedan laws was disastrous to the possible advancement of surgical science. They absolutely prohibited human dissection, and made the acquirement of any real knowledge of the sur- Reflections. gical diseases of women impossible. Anatomy could only be studied from the writings of the ancients, which accounts for original investigation remaining where the Greek teachers left it.

We must now travel into Italy to find the one The Italian schools. remaining home of medicine, here represented by the celebrated school of Salerno. This was, later on, eclipsed by the establishment of others at Bologna, where Mondini publicly dissected two human bodies in A.D. 1315, and was followed

The rapid growth of other European schools.

by a rapid growth of medical schools in many of the large European towns, notably Vienna, Paris, Padua, Venice, and Florence.

Thomas Linacre.

The next century gave birth to Thomas Linacre, who after visiting many of these schools received the appointment of physician to Henry VIII., and devoted the fortune he acquired, in this position, to the foundation of a chair of Hippocratic and Galenic medicine at Oxford and Cambridge.

For this service alone his memory is deserving of lasting honour, but it is associated with many other good works, and with one of the utmost importance to the scientific development of the profession his life ennobled.

The Royal College of Physicians of London.

Linacre was mainly instrumental in transferring the right of the bishops to license medical practitioners in London, to England's first College of Medicine, and this was the Royal College of Physicians of London, established by him A.D. 1520.

At this stage, I conclude my sketch of the early evolution of medicine and surgery, as a science.

Reflections.

We have found its progress developed, or retarded, according to its subjection to influences favourable or unfavourable; and among these last we especially notice a too intimate association with any varying forms of religion,

philosophical doctrines, and popular discussions. The disposition towards onward movement is always evident with the appearance of any distinct school of teaching, but its real step forward is only capable of leaving a clear foot-print behind, when it is unhampered by restrictions too meddlesome and speculations too fanciful.

This criticism applies equally to the value of "schools," in the sense of "seats of learning," and includes those latest developments which have been evolved from our larger European hospitals. Among these, there is one in which we all have, at least, a personal interest, and that is the school we call "St. George's."

Its evolution is sufficiently associated with that of its parent hospital to justify my history in dating back to those days when the fence of Lanesborough House enclosed the stage I now occupy, and the idea of establishing an hospital called St. George's, here, or anywhere else, had, so far as my researches serve me, never been entertained.

Lanesborough House was then the seat of that eccentric nobleman who regarded dancing as the panacea for most diseases, and strongly recommended the exercise to Queen Caroline, as a certain cure for gout. These were those "good old days," so often referred to by the

earlier writers of this century, in which the Westminster Infirmary,* represented the only home of charitable relief, for the poor in the West-end of London.

The growing demands upon the limited resources of this, the first hospital dependent upon voluntary contributions, were complicated with a structural decay which earnestly appealed for fresh masonry. Out of the answer to this cry for help, we trace the birth and growth of St. George's Hospital.

The managers of the Westminster Infirmary had the option of selecting between a site in Castle Lane, Pimlico, and Lanesborough House, and a meeting was convened to consider this choice. After stormy discussions, the final decision was referred to a general board of subscribers, who accepted the opportunities suggested by the bargain in Castle Lane. Upon this settlement of the question, many of the original subscribers, backed up by the entire staff of physicians, who were in favour of Lanesborough House, determined to there establish an independent institution, whose term of existence, like that of the Westminster Infirmary, would have to be controlled by the amount obtained from voluntary contributions. This decision was arrived at in the middle of October 1733,

* Instituted in 1719.

and active measures towards organising the scheme were at once undertaken.

Within three months a staff of honorary physicians and surgeons was elected, a long list of patrons, headed by Royalty, was secured, the necessary alterations of the building were completed, and an equipment sufficient for the reception of thirty in-patients was established.

This is the story of our Hospital being evolved from Lanesborough House. On the 1st of January 1734 she opened her doors, and labelled herself "St. George's Hospital, for the sick and lame, supported by the voluntary Subscriptions and Benefactions of the nobility, gentry, and others."*

This early appeal was answered more quickly than many of those which have been since issued, even within my own recollection, and under greater stress of circumstance, as before a year had elapsed the accommodating power of the institution was exactly doubled.

The next stage of development was a most important one, for it included the purchase of the lease of Lanesborough House† for the modest sum of £500, also the possession of two acres of adjoining land, from Robert, Lord

* This is the exact wording of an inscriptive tablet which was placed upon the centre pediment.

† From the Dean and Chapter of Westminster.

Grosvenor,* and the extension of the existing building, up to a capability of receiving two hundred in-patients. I can find no record of any further development until long after John Howard, the philanthropist, in his observations of the hospitals of England, summed up the sanitary arrangements of St. George's in words few but trenchant, for this is what he said : " I found offensive wards, old beds, sanded floors, and dirty walls." I wonder what he would report if he could revisit us to-day.

In 1825, the growing desire to demolish the existing building and to erect a fresh one, took the active form of initiating a rebuilding fund, and obtaining tenders from various contractors. But four years had to pass before a sufficient amount was collected to justify the erection of the new wings which were soon to be joined to a new body.

In 1834, exactly one hundred years after the birth of St. George's the first, with its thirty beds, congratulations are invited upon the birth of St. George's the second, with its three hundred and sixty beds, and its Act of Incorporation, which confirmed all its existing rights and empowered the trustees to hold property to the amount of £20,000 per annum.

We now reach a stage when St. George's

* At a peppercorn rent.

takes its rank among the great metropolitan hospitals, with its laws permitting the visiting physicians and surgeons to have a limited number of pupils who might attend their visits to the wards, receive clinical instruction and assist in dressing patients. And so far the primary object of such an institution, which is the relief of the sick, was successfully attained. But as Dr. Page tells us, it fails to fulfil its due measure of usefulness, until it contributes to the education of medical practitioners and to the advancement of medicine and surgery.*

John Hunter was presumably of this opinion in 1783, when he made the proposal for the erection of a school on the footing of Guy's, and that each surgeon should deliver six lectures, though he was still giving his complete series of lectures in Great Windmill Street, which the pupils of St. George's Hospital were allowed to attend gratuitously. Unfortunately nearly half a century passed before his suggestion was practically utilised in the autumn of 1831, when the first course of lectures on medicine, surgery, *Materia Medica* and midwifery, was commenced in the theatre attached to the new Hospital, then in process of erection. Anatomy was still taught, and dissections carried on at Great

* Account of St. George's Hospital and School by Dr. Page, p. 10.

Windmill Street, and in a theatre at Mr. Lane's house, adjoining St. George's, in Grosvenor Place, while chemistry classes were held at the Royal Institution, in Albemarle Street.

Great as were the additional advantages thus opened out to the pupils of the hospital, the inconvenience of having the several centres of instruction so widely separated, was not long in making itself felt, and resulted in an anatomical theatre, museum, and lecture rooms, being erected at Kinnerton Street, about a fourth of a mile distant from St. George's. This was in 1849, and shortly before the Governors had decided to grant the sum of £200 "for providing instruction in anatomy and chemistry, and for rent, taxes, and repairs of the school premises," a grant which was annually renewed until those particular premises were abandoned. Some of the Governors also established prizes for competition among the students, the first being a clinical one, founded by Sir Benjamin Brodie, who generously advanced the whole of the capital for the formation in Kinnerton Street of this, the first compact school of St. George's Hospital.

Its management was entrusted to a committee composed of the entire medical and surgical staff, which was to be under the control of a council composed of twelve members of the Medical

School Committee and twelve other governors appointed annually by the Weekly Board.

It was towards the close of this evolutionary period of our school, in 1866, when Dr. Page publicly claimed that it might “fairly challenge comparison, in almost every respect, with those of the older and more richly endowed hospitals of the metropolis.”

What shall we say about our present school, opened two years later, and now so greatly developed and improved? We leave this theatre to find, in every passage and corridor, a short path to the grandest opportunities for learning, and to the encouragement of the student in the grandest of careers. Witness our museum, dissecting and post-mortem rooms, library, lecture theatres, and various laboratories, now almost within touch of each other, and last, though perhaps not least, our students' club. We then turn to the annual report of the Hospital, and notice the important staff of teachers in every branch of medical and surgical science—teachers who have shown themselves devoted to the welfare and interest of their pupils. Mark too the long list of prizes and scholarships offered, some of them almost sufficient in value to represent a free education.

A moment's pause enables us to contrast these advantages with those I have referred to

as open to the students of 1831, scarcely sixty years ago.

The thrill of pride which quickens every pulse may be forgiven, for we are all students, and all these benefits are ours. The wave of gratitude which follows, swells with desire to break into a foam of thanks over that rock of glorious tradition upon which is engraved the names of so many benefactors to our school.

I cannot give you the whole of this long and noble list, but surmounted by the date of 1868, which witnessed the opening of our new School, I see four names so deeply graven that I cannot refrain from reading them off. They are those of the Deans who have so wisely guided our ship into waters with soundings deep enough to justify a safe onward voyage.

Andrew Barclay is the first of these names, Timothy Holmes is the second, William Wadham is the third, and Thomas Whipham is the fourth.

I dare no more than venture to tell you that no annual address delivered in this or any other theatre has closed with mention of names more worthy of our profound respect and affectionate memory.